

Longacre's Ledger

The Journal of The Flying Eagle and Indian Cent Collectors' Society

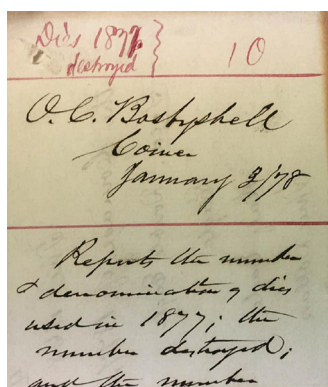
Volume 31.3, Issue #113

www.fly-inclub.org

December 2021



**1856 Flying Eagle
Strike Attribution**
By Sgt. Joe Friday
(and Rick Snow)



**1877 Dies destroyed,
Used and Retained.**
By Roger Burdette



**Keeping RD Indian
Cents RD**
Greg Slaughter



Lathe lines
1864 No L Snow-11
By Richard Snow

Available now!

The Flying Eagle and Indian Cent Attribution Guide Third Edition



This is a two-volume set, 900 pages, color and hardcover.

Every American alive during the tumultuous years from before the Civil War to the time of Teddy Roosevelt carried in their pockets Indian cents. They are an integral part of the history of the United States. The times that influenced these coins are detailed in a year-by-year historical review. All Proofs, Patterns, Experimental and Trial pieces from 1850 onward are listed and given a full analysis. Every premium-value variety is detailed with edition census information and premium pricing.

*The Guide Book of
Flying Eagle and Indian Head
3rd Edition
By Richard Snow*

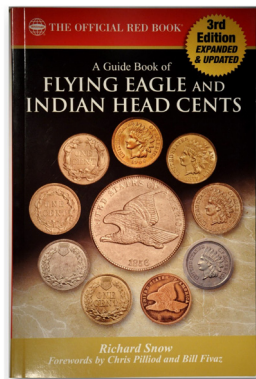
The newly released book in the "Bowers' series" of books by Whitman Publishing. New prices, images, and a greatly expanded chapters.

100 top Varieties listed!

PDS Grading explained

**Counterfeits, Patterns
and Proofs.**

**Plus a brand new section
including photographs on
Flying Eagle and Indian cent
exonumia by Charmy Harker "The Penny Lady"**



\$19.00 Plus \$3.50 shipping.

**NEW Price
While supplies last
\$125.00**

of 25 years of research by Rick Snow. membership of the Fly-In club since its expanded the information y. Autographed upon request.

~~199.00~~ Plus \$5 postage.



**E-book (pdf) now available for
\$75 \$50.**

**Eagle Eye
P.O. Box 32891
Tucson, AZ 85751**

**Check, VISA, M/C,
Discover/ AmEx/ PayPal accepted.
Order by phone at 866-323-2646,
On-line at www.indiancent.com,**



The Flying Eagle and Indian Cent Collectors' Society

Our mission is to gather and disseminate information related to James B. Longacre (1794-1869), with emphasis on his work as Chief Engraver of the Mint (1844 -1869) with a primary focus on his Flying Eagle and Indian Cent coinage.

Founded 1991

www.fly-inclub.org

Club Officers

President.....	Chris Pilliod	cpilliod@cartech.com
Vice President	Tim Cartwright	tcartwright@floratine.com
Secretary	Sheldon Freed	marsfreed@verizon.net
Treasurer	Vern Sebbby	melva6906@indianvalley.com
State Representatives Chair	Charmy Harker	charm@thepennylady.com
Editor.....	Rick Snow	rick@indiancent.com
Webmaster.....	Dave Noble	tdnoble@sbcglobal.net

State Representatives

The following individuals have indicated their willingness to help promote the club and its activities in their state.

Arizona.....	Rick Snow	rick@indiancent.com	Nebraska	Quent Hansen	quentncathy@aol.com
California	Charmy Harker	charm@thepennylady.com	New Jersey	Doug Ball	dball59743@comcast.net
Colorado.....	Mark Hammang	mhammang@hotmail.com	New York	W.O. (Bill) Walker	worian@aol.com
Delaware	Jesse L. Furry, Sr.	tinman44pa@gmail.com	Ohio.....	David Dannemiller	daviddannemiller@icloud.com
Florida	Richard Spencer	rsinvestments@comcast.com	Oklahoma.....	Russell Doughty	rustymonroe@gmail.com
Idaho	Dan Templeman	coindan@q.com	Oklahoma.....	Michael Hassler	rarensense@mail.com
Indiana.....	David Brody	dbrody@galaxyinternet.net	Pennsylvania	Chris Pilliod	cpilliod@msn.com
Kansas	Mark McWherter	markimc@att.net	South Carolina...	Jerry Sajbel	jerome.sajbel@basf.com
Louisiana.....	Lynn Ourso	neworleansrarecoins@gmail.com	Virginia.....	John Zampedro	jonzampedro@cox.net
Michigan.....	Jason Rodgers	jason@bedfordcoin.com	Wisconsin.....	Paul Hanan	paulhanan@aol.com
Montana	M.P. Hamill	hamill@bresnan.net			

Please help the editor in updating any errors or changes. If you would like to become a state representative (there can be more than one per state) please contact the State Representative Chair, Charmy Harker.

On the cover...

The 1864 No L "Lathe Lines" variety, Snow-16 is very interesting as it shows concentric lines on the obverse.

Longacre's Ledger

2021 Vol. 31.3 Issue #113

Contents

Featured Articles

<i>1856 Flying Eagle Strike Attribution</i> <i>By Sgt. Joe Friday (and Rick Snow)...</i>	9
<i>1856 Flying Eagle Cents - Hidden Treasures</i> <i>By Greg Slaughter</i>	15
<i>1877 Dies destroyed</i> <i>By Roger Burdette with Rick Snow...</i>	18
<i>Lathe lines. 1864 No L Snow-11</i> <i>By Richard Snow</i>	20
<i>Keeping RD Indian Cents RD</i> <i>By Greg Slaughter</i>	22

<i>Something New. 1862 S13, 1875 S19,</i> <i>1880 S19, 1891 S28, 1893 S23, 1902 S22,</i> <i>1904 S25, 1905 S36, 1908 S18.</i> <i>By Richard Snow</i>	27
<i>President's Letter</i>	5

Editor: Rick Snow
P.O. Box 32891 Tucson, AZ 85751
(866) 323-2646
rick@indiancent.com

Submission guidelines

If you have a substantive article you would like to contribute, please follow these guidelines:

- ✓ If you have internet access, you can send text to the editor's e-mail address below. Please send images in separate files.
- ✓ You may also send files and images on a CD-W disk or other storage device to the editor's address below. Storage devices will be returned upon request.
- ✓ Images of material can be made by the editor for use in the Journal. Please include the necessary return postage with the submission.
- ✓ Please feel free to contact the editor if you have any questions.

Submission deadlines

Please submit all articles, letters, columns, press releases and advertisements no later than the following dates to assure inclusion:

Issue	Deadline	Show issue
#114 2022 Vol. 32.1 ...	March 1, 2022	CSNS 2022
#115 2022 Vol. 32.2 ...	July 1, 2022	ANA 2022
#116 2022 Vol. 32.3 ...	November 1, 2022	FUN 2023
#117 2023 Vol. 33.1 ...	March 1, 2023	CSNS 2023

Advertising Rates:

Per year - Three issues

Send payment to Treasurer
Send ad copy to Editor.

Quarter Page:	\$75
Half Page.....	\$150
Full page.....	\$300
Inside back cover	\$750
Outside back cover	\$1,200

Membership

\$25 per year.

Download applications at
www.fly-inclub.org

Fly-In Club

P.O. Box 559

Sandwich, Illinois 60548

Or send the payment via Paypal to:
flyinclub@gmail.com

Special thanks to Charmy Harker
for proofreading the articles.

The President's Letter

By Chris Pilliod

This is my 71st President's Letter and I found myself driving to the Albany Coin Show in New York last week. I had never made that show before but had heard good things; and on a lovely cool December morning I enjoyed the views the Catskills offered against the wild blue yonder. The trees were barren offering a broad view of the majestic rock formations. I had never been in this part of the country.

Somewhere along the way I asked myself "With all this inflation and pandemic, I wonder what's gonna happen with our nation's coinage???"

We all love and collect Flying Eagle and Indian Cents, and many of us naturally branch out to the preceding large Cents as well as the succeeding Lincoln Cents. So how long will the cent be around? The future of small-change coinage, and really all coinage, is in a state of flux. And the honest answer is no one knows for sure.

I am certainly no micro- or macro-economist, even though my sons do tell me I am so miserly I have been bestowed an honorary degree in the field. Seriously, I have been fortunate to find myself in the rarified position of working directly with the Mint on the future of coinage. One thing I made a point of doing during those two years or so was ask a ton of questions, not just metallurgical, but economic as well. The day after I returned from Albany I decided to give the Mint a call and get a first-hand accounting of our coinage. It had been prior to the pandemic since we had spoken. My contact is the lead technical engineer in charge of the metallurgy of coining alloys, but who also has a comprehensive understanding of commercial matters.

When the price of zinc peaked in 2008 Congress authorized alternative solutions to coinage alloys, targeting the cent. At the time the cent cost nearly 2.5c each

to strike. And while the price of the zinc is 25% below its peak in 2008 they are again on the rise. In the last 11 months zinc has risen by 15% with a strong upward trend. Keep in mind the penny is 98% zinc with a 1% copper-plating on each side. As such, we started the conversation with the cent and I am paraphrasing from our approximately one hour call as well as a call we held just at the onset of the pandemic.

To facilitate this discussion I have included a table with various coinage alloys and their current price.

CFP: "With the price of zinc again rising, is there any discussion or rumors you have heard about the elimination of this denomination?"

Mint: "No. I have not heard any of this. If anything, the opposite may be happening. You've probably seen the signs indicating a shortage of coins. So actually production rates have been up since the pandemic began. So no, I don't think the cent will go away anytime soon. In addition, almost 55% of our entire mintage is the cent, so this would have a tremendous impact on operations and supply chain."

NOTE: It is important to note the enviable position the US Mint is in compared to its counterparts around the world. And that is, while the cent and nickel are money-losers, other coins are produced below face, but even more importantly are "numismatic" and "bullion" sales. Bullion demand, gold and silver eagles soared during the pandemic to record levels. Gold bullion revenue increased by 375% during the pandemic, marking the first time more one-ounce gold eagles were struck than 1877 Indian Cents.

Silver eagles saw a more modest 29% increase in demand. Bullion along with numismatic marketing, proof sets, and commemoratives are profit makers and



Metal	Cost per Lb, 2021 US Dollars
Steel (1943 cent)	\$ 0.13
Aluminum	\$ 1.20
Zinc (1c)	\$ 1.48
Copper	\$ 4.33
75% Cu-25% Ni (5c)	\$ 5.55
Nickel	\$ 9.23
Silver	\$ 359.84

the Mint continues to operate its bottom line profitably. As such, it is easier to tolerate losses on the cent and nickel when the overall picture is rosy.

CFP: "But a penny has very little spending power these days. A lot of people don't even care about them. I might be the only person I know who still leans over and picks them up anymore."

Mint: "Well, that's true, the cent has very little velocity in commerce (the time between being issued and finding its final resting place on a dresser, sidewalk or penny jar). But keep in mind Chris there's also the impact of rounding in commerce and the software changes needed to accomplish this. Also, there still are a number of small item sales where rounding would have a more dramatic impact on revenues."

CFP: "Regardless, is any continued research being performed on reducing the cost of coinage?"

Mint: "Yes. We are still evaluating several options. One of which is actually a copper-plated steel alloy." (This would essentially replace zinc at \$1.47 per pound versus steel at 13c per pound).

CFP: "But this would be magnetic right? Like the steel cents of 1943."

Mint: "Yes, but we are seeing if commerce can work through this."

CFP: "Wouldn't they much harder to strike??? In the annealed condition any carbon steel is much harder than zinc, copper, or nickel."

Mint: "Well in the initial test strikings surprisingly we didn't find this to be the case. They struck up well."

CFP: "But isn't there a huge metallurgical difference between the samples you produced and how the alloy would perform in full-blown production? You're basically comparing an as-cast piece to a wrought piece in production."

Mint: "That's what we need to evaluate."

CFP: "I would think there will be. So iron or steel still shows favor in testing for coinage?"

Mint: "Well, the cost of steel is just a fraction, less than one-tenth the cost of most of the other candidates. You can buy 40-pounds of steel for the same cost as one pound of copper. And the density is in line with what is desired. But on the other hand you need to contend with it being magnetic as well as its poor corrosion resistance. Recall the steel cents during World War II. These are major issues we would need to work through. There are issues with magnetism

other nations don't deal with. We have the world's largest vending industry and this would have a huge impact on machines being able to read the new alloy's metallurgical signal. They would have to re-program machines. People don't realize the vast array of coin-deposit machines still in existence—parking meters, soda and snack, laundry, and 20 or 30 more important segments. The cost to re-program is astronomical."

CFP: "Wouldn't you be able to take out a lot of cost of the cent if you eliminate the plating?"

Mint: "Yes, for sure. But keep in mind the cent has been historically copper. And being similar in size to the dime it needs to maintain this color to avoid confusion with the dime. Remember all the issues confusing the Susan B Anthony dollars with quarters? The same thing would happen if the cent is white or gray."

NOTE: Of the 55 metals on the periodic table only two are brown. The remainder are white, silver or gray in color. Only copper and gold are not gray. And gold is probably not an economic solution to replacing copper on the cent.

CFP: "What about any other alloys, for the cent or other denominations?"

Mint: "Yes. Changing the composition of the 5-cent piece from 75% Cu – 25% Ni to 80% Cu – 20% is a seamless transition. The specific gravity (density) of nickel and copper is almost identical so this would not impact weight, or color for that matter. What most people don't realize is the composition of the plating on the dime and quarter is exactly the same as the composition of the nickel, so this could be lever-



aged as well. But the cost savings associated with this change is so small it has been deemed insignificant.”

CFP: “So why not just make the dime and quarter the same as the nickel? Rather than a pure copper-core clad with copper-nickel.”

Mint: “Simply the cost. It is cheaper to clad pure copper with copper-nickel than to employ a monolithic copper-nickel alloy like the 5-cent piece. Copper is half the price of nickel, and in 1964 when we went off silver-based coinage the difference was even more. In 1964 one ounce of silver could buy you 65 ounces of copper. And copper was a perfect match in vending machines so commerce was completely unaffected by the coinage changes in 1964. And copper was close in density to silver so it was a very seamless transition. They had it easy in 1964. Our job is a lot tougher these days.”

CFP: “You have mentioned plating and cladding often for any new coinage alloys. Is there any downside to this?”

Mint: “Well, obviously, there is cost involved with any cladding operation. But it does involve costs. The bottom line is it offers a net savings by employing a cheaper core metal. I would add that an increasingly important concern is the heightened concern for the environment. Plating and cladding all employ chemicals and acids that must be properly disposed of. And this is a big concern.”

CFP: “Why not just keep all coinage monolithic and reduce nickel costs by going higher than 80% copper by weight?”

Mint: “Once you go much above 80% the color starts to turn tannish or brown. This wouldn’t work from a visual appearance, or cosmetic point of view for higher denominations.”

CFP: “So they would look like copper-nickel Indian Cents and Flying Eagles. Consumers associate brown with base or cheaper metals versus the traditional silver.”

Mint: “Yes, the same reason aluminum is not of consideration. Aluminum is 20% cheaper than zinc, and almost three times lighter. So for the same amount of money you could strike three times as many copper-plated aluminum cents than the current copper-plated zinc we are using. But aluminum is so light people consider it play or phony money. So it is not an option. We are reviewing other options as well, including non-magnetic iron-based alloys. One is showing initial promise on a limited number of test-strikings. We may

need some help from Carpenter (my employer) with upscaling and producing blanks for a large-scale trial.”

CFP: “The cost of producing the nickel has dropped dramatically since 2008 when it cost almost 12c per issue. It is now down to about 7.5c each. Is there really any incentive to test other alloys for the 5-cent piece?”

Mint: “Well, keep in mind, any alloy that performs acceptably for the 5-cent piece may possibly be leveraged for the dime and quarter as well. These three denominations are almost half of production by mintage, and well over half by weight. So a lot of potential savings here. There is very little demand for Half Dollars or Dollar coins. The cost of producing these coins has also been aided by significant improvements in productivity at the Mint as well as the lower metal costs as compared to 2008.”

NOTE: A long conversation commenced about the steel alloy being targeted with the pros and cons discussed. I had never heard of the alloy they are specifically evaluating (and I’ve heard of most). I did express my concerns based on working experience, and the potential challenges that may lay ahead.

CFP: “So a lot of looking at steel as a replacement?”

Mint: “Just the cost is so much lower than any alternative metal, it gets a lot of attention.”

CFP: “Well, with COVID and inflation and everything else going on in the world, isn’t there more hesitancy to make any changes to our coinage?”

Mint: “Well, we don’t get involved with any of that. But perhaps.”

CFP: “Have a wonderful Holiday season.”

Mint: “You too Chris. And may 2022 be healthy and prosperous for all of us.”





***“The Secrets of Flying Eagle and Indian Cents”
An eSeminar by Rick Snow
on the ANA eLearning Channel***

Rick Snow’s seminar all about Flying Eagle and Indian cents is now live on the American Numismatic Association’s YouTube channel.

The two-hour talk covers history, grading, varieties, problem coins and counterfeits. Also covered within these topics are patterns and proofs.

A link can be found at Rick’s website:

www.indiancent.com



The back issues of the Longacre’s Ledger are now accessible on the Newman Numismatic Portal.

The site is managed by the Washington University in St. Louis, Missouri. Access is free to all and the files can be viewed at the following link:

<https://nnp.wustl.edu/library/publisherdetail/521577>

Special thanks to Len Augsburger for working on this.

NEW ORLEANS RARE COINS

SPECIALIZING IN

Flying Eagle Cents • Indian Cents • Varieties

NewOrleansRareCoins@gmail.com

I Attend Several Major Coin Shows

Send Me Your Want List

Buy • Sell • Trade • Appraisals

Lynn Ourso

P.O. Box 1

Brusly, Louisiana 70719

225-937-5105

*1856 Flying Eagle Strike Attribution
By Sgt. Joe Friday (and Rick Snow)*

The year is 1859, it's raining and it's a Tuesday. The city is Philadelphia, city of brotherly love. I work here. I'm a cop. We were working bunco on the day shift. My boss is Captain Didion. My partner's Frank Smith. I'm Friday.

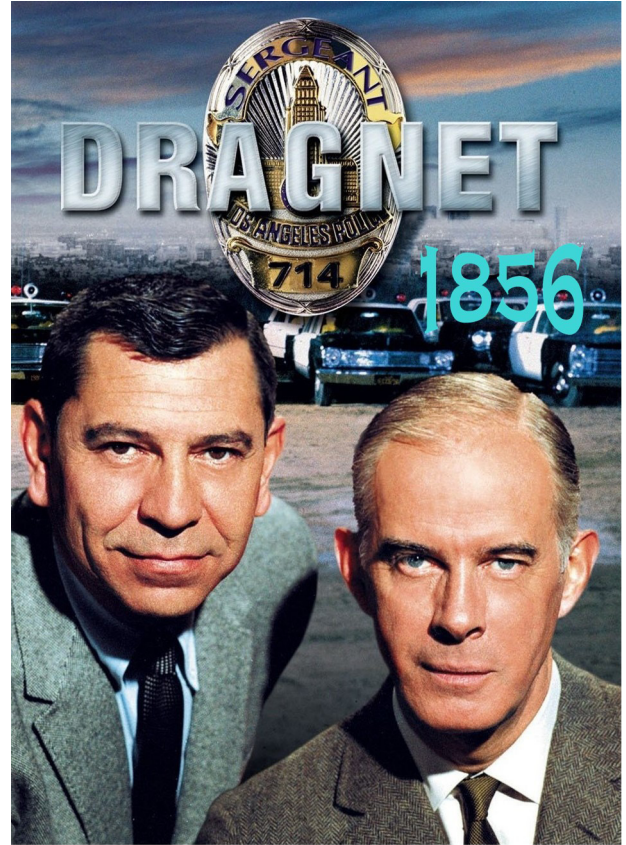
Philly is the center of money in America. While New Yorkers love their money. Here, we make the money. It's called the Mint. We're working a story about cents being produced at the Mint that were smaller than the old coppers and made out of nickel. We got the complaint at 2:46 PM. A local coin collector said he was offered some fake coins. His name is Bushnell, Charles Bushnell. I asked him how long he had been a coin collector. He corrected me and said he was a numismatist and had collected coins for many years. I looked at Frank and shrugged. "OK, so what's this about so-called fake coins?"

"The Mint made these new cents out of nickel a few years ago before the regular issue in 1857. These are dated 1856. We had a hard time getting any because they only distributed them to Congress and the President and his friends. I was able to acquire some, but it cost me a dandy price. Officer..." "Friday." I corrected him. "Officer Friday, how much do you make?" I cautioned him that I was the one asking the questions, but I relented and said "\$1.25 a day. Why do you ask?" Well, I paid more than that for my 1856 cent."

"You must love your coins" I said. "Yes, yes, I do. But, I was just offered another 1856 nickel cent yesterday for just 25 cents. And it looks nothing like the others I own. Mine are circulation strikes while the one I was offered was a Proof."

This collec...sorry, numismatist, was filling me up with mumbo-jumbo jargon I know nothing about, so I asked him to explain. "OK, a circulation strike coin is the kind you find in your pocket. It's struck on a production press that can spit out 100 coins a minute! The dies are carefully prepared, but they wear out quickly. A Proof is specially made with new dies and are struck on a medal press. The Proofs are made for collectors to add perfectly-made coins to their cabinet. Here, look at the difference."

He handed me two coins, both were 1856 nickel cents. These have a Flying Eagle on them. One had a satiny look and the other had mirrored fields. "Which one is a Proof" I asked.



The one with the mirrored fields is supposed to be the proof, but here is another one I have that also has mirrored fields, but I got it two years ago. It's just an earlier die state of this circulation strike example. "How do you know?" I asked. "They have the same dies! They were struck at the same time, but the mirrored fields wore off as they struck the coins on the production press." While I was getting my education regarding proofs and circulation strike coins, I stopped him and asked him why he thought the proof was a fake? "Officer Friday, when you know something to be true, like the coins being scarce because only a few hundred are known, and then when a whole lot more show up. What else could they be?"

This was going to be a tough assignment. I thanked Mr. Bushnell for his time. Captain Dideon has given Frank and me special powers to time-travel, so we decided to go to the source, The U.S. Mint. It's December, 1856.

We arrived at the Mint at 10:23 AM. It's cold and the Christmas decorations are up all around the building. The Mint is on Chestnut and Juniper. We asked for The Mint Director, James Snowden.

“Director Snowden, I’m Friday and this is my partner, Smith. We’d like to ask you some questions.” Snowden replied with a gracious explanation of the Mint’s history and the goings on at the Mint. “Sir, I just need some facts. Are you making small nickel cents here today.” “Why, yes we are! It’s a secret, though. How did you find out?” Snowden asked. “We have our sources,” I replied.

Snowden showed us the production room where the nickel cents were being made. The press had stopped and two men were discussing something. “That is Mr. Longacre, our Engraver, and Mr. Booth, the Melter and Refiner.” Snowden said as he walked us over to them.

“What seems to be the problem?” I asked. Mr. Longacre spoke first. “The coins are shifting during coining.” he said. “When we strike coins at such a high speed the die shifts slightly when the coin is struck. This makes a slight doubling appearance on parts of the coin. We’re trying to fix this.” Booth spoke up, “It’s the damn nickel. This is the first time we’ve tried to strike nickel coins on these machines.”



Shift (Strike) Doubling

I stopped them from going on with more technical talk, and asked them if these are circulation style strikes or Proof. They were a bit surprised I knew what a Proof was. Longacre replied first. “These are Proof dies but we’re trying to see if we can strike them at full speed.” Booth added, “This is the first time we’ve ever struck nickel coins.” “Yes, you said that before.” I said flatly. “Let me get this straight, your trying to figure out if you can make these coins in a regular press run. Would you consider these Proofs or circulation strikes?”

Oh these aren’t Proofs” Longacre said. We make proofs over there.” He motioned to the big medal press, which is screw press, operated by hand. I asked Snowden what they plan to do with the coins.

“We’ll be passing these out to Congress and also President Pierce.” Frank and I thanked them and left.

On the stairs outside the building I started checking my notes. “You know Frank, something doesn’t add up.” What do you mean?” Frank said. “We’ll if they wanted to avoid the hassles with the production problems they were having, why don’t they just strike them on the medal press.” Frank stated the obvious, “They must want to make sure they can make them when the stiffes in Congress pass the bill.”

I stopped in my tracks. “Frank, there’s one more question we need answered.” We turned around and went back inside. The three men were still working on the press. “Mr. Director, one more thing. How many dies do you have making these coins?” Snowden conferred with Longacre. “We made four sets of dies, but a few of them were not perfect. Right now we’re only using one die pair.” I countered with a second question. “Were these dies made just like regular production dies?” “No”, Longacre interjected. “These dies are made to Proof standards. We still consider these pattern coins.” I thanked them and left the building.

Next, we time-traveled back to 1859 to talk to another coin expert with intimate knowledge of the Mint. His name is William Dubois. “Mr. Dubois, my name is Friday. We’re detectives looking for some answers about strange things coming from the Mint.” Dubois got nervous, a bit more nervous than we expected an innocent person to be. “I don’t know anything about it.” “About what.” We asked. “Are you here about the dollars?” he asked. “No, were here about 1856 cents, the ones with the Flying Eagle.”

Dubois relaxed a bit and now started to be especially talkative. “The ‘56 nicks are being struck at the Mint.” “Pardon?” I asked for clarification. Dubois continued. “Nicks, you know, nickel cents. They are selling them through channels to their select friends. I got a bunch and sold them all right away. They are very popular. I am very good friends with everybody at the Mint. They sell me all kinds of patterns and restrikes.” “Restrikes, what’s a restrike? I asked. “Well, the ‘56 nicks are restrikes. They first made a few in 1856, but you can’t find them anymore. They still had the dies so they struck a whole bunch off and sold them. Director Snowden uses the money for his, or the Mint’s Washington medal collection. He loves George Washington.” We thanked Dubois for his time and walked back to the squad carriage. “Something fishy with that guy.” I said.

We went back to see Bushnell. “Mr. Bushnell, I think we discovered the source of your so-called fakes. They’re coming from the Mint. By my reasoning, they cannot be fakes if the Mint is making them. We believe these are called restrikes.” Bushnell was concerned about my statement. “You know, if they can make more examples of rare dates this many years after the fact, then nothing can be considered rare. He sat down and studied the group of 1856 cents on his table. We stood there and waited....and waited. “Oh, I’m sorry, can I offer you gentlemen some coffee while I figure this out?” Frank and I exchanged glances and accepted the offer.

After about 15 minutes, Bushnell blurted out. “I see it! I think I have figured this out.” We jumped up and looked at his scribbles in his notebook. “Look the original ones I bought back a few years ago all have the recutting on the 5. These new ones, lets say, restrikes, don’t. The restrikes have a dot in the center of the reverse. That’s how you can tell them apart!” We know the original ones sometimes have shifted letters. That’s because they were struck on the regular press.” We were impressed with his knowledge of the



Original Identifier - Recut (Repunched) 5

inner workings of the Mint. “Those originals, although struck with dies made to the same standards as Proofs, are not Proofs, the coins they make are made just like any old regular issues. These restrikes are all Proofs. Collectors love Proofs.”

“Detectives, I’m so sorry I wasted your time. Please accept this ‘56 cent as token of my appreciation.” Sir, thank you but we are not allowed to accept gifts.” We thanked him and left.

“You know Frank, this will be confusing to coin collectors in the future. How do you think

they should look at these facts we found?” Frank thought a minute and said: “The coins tell the story. If that numismatist could figure it out just by looking at the coins, the others should as well. You can’t just look at one coin out of context. You need to know the characteristics of the whole group to get the whole story.” I said “Frank, That’s right. Let’s get a donut and coffee.” “What’s a donut?”



Original. Circulation Strike



Restrike Identifier - Centering Dot



Restrike. Proof Strike

DAVE'S

D.C.W. Collection
(Trusted name in numismatics)



“The Collector’s Friend” ®

**I BUY-SELL-TRADE
Flying Eagle and Indian Cents.**

Large Free pricelist, very strong buyer

**When it comes to high grades or
Ex. Rare Varieties, see me.
Strict Grading a “must”
ANA LM-4078 FUN-CONECA**

**P.O. Box 500850 - San Diego, CA 92150-0850
PHONE: 800-364-6718 - FAX 858-513-6557
www.thecollectorsfriend.com**

WANTED

**Flying Eagle
and
Indian Cent
collectors**



**Join the
FLY-IN CLUB**

Send \$25 to
Fly-In Club
P.O. Box 559
Sandwich, IL 60548

Paypal to:
flyincoinclub@gmail.com



Women In Numismatics

WomenInNumismatics.com

Founded in 1991, WIN is the premiere organization for women in the field of numismatics.

As a nationally incorporated nonprofit, our chartered goals are to encourage fellowship and learning through networking and social events, as well as offering educational seminars, scholarship programs, and our semi-annual literary publication, *Winning Ways*.

President Charmy Harker is leading the board in a revitalization of WIN, focusing on expanding membership and providing social-media platforms for members to connect, discuss, and promote their brands.

Collector or dealer, novice or expert, we invite you to join us in the largest and most respected organization for Women In Numismatics.



APPLICATION FOR MEMBERSHIP

MAIL TO:

Women in Numismatics

Cindy Wibker, Secretary

PO Box 471147

Lake Monroe, FL 32747-1147

Regular Membership	\$25
Associate Membership ¹	\$10
Junior Membership ²	\$5

Payable January 1st each year

Please enclose check with your application

THANK YOU!

Questions?

www.womeninnumismatics.com/contact-us

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Email: _____

Referred By: ☐ ☐ ☐ ☐ ☐

Significant Other to Regular Member: _____

Signature: _____ Date: _____

Optional:

Describe your interests in numismatics (collector or dealer; specialty, related organizations, etc.):

Are you interested in being of service to WIN?

(writing articles, speaking, serving on the board, fundraising, etc.) _____

What goals would you like to accomplish as a member of WIN?

¹ Significant Other to a Regular Member ² Age 18 or Younger

1856 Flying Eagle Cents - Hidden Treasures

By Greg Slaughter

Even though they may have different goals, collectors and investors think alike in one way. Both are looking for opportunities to acquire something of value that the market currently undervalues. When there is a difference between what a coin appears to be worth and what it may actually be worth, there are opportunities for collectors. There are several factors unique to 1856 Flying Eagle Cents that tend to obscure value. We'll examine those factors, present an analytical way to uncover and evaluate hidden value, and ultimately reveal three examples of undervalued hidden treasures.

Factors Hiding Value

For many coins all you need to know are two things to determine that coin's value:

1. Its format: MS or Proof
2. Its grade (e.g. 66 as in PR66)

This general rule is the basis of the value proposition of third-party graders claiming one should be able to bid on a coin sight unseen, knowing only the format and grade that they put on that coin's holder.

But, this general rule doesn't work for the 1856 Flying Eagle Cent. First of all, whether a coin is MS or Proof is actually less important than whether it is a First Strike or a Restrike. As covered in the previous issue, with only 200 coins surviving in all grades, the First Strikes are rarer and more valuable than the Restrikes for which there are over 1,000 coins surviving in all grades. However, PCGS doesn't even have the designations of First Strike or Restrike.

To make matters worse, the First Strikes are typically confused with the MS coins and the Restrikes are typically confused with the Proofs. In fact, many collectors know the First Strikes are more collectible than the Restrikes, and incorrectly assume the First Strikes are the MS coins. Although many First Strikes are MS coins and many Restrikes are Proofs, there are quite a few counter-examples.

Another major factor hiding value is misattribution of MS versus Proof. As covered in an earlier Longacre Ledger article, there are quite a few instances where MS coins have been misattributed by PCGS as Proofs and vice-versa. Generally speaking, the MS coins tend to be more rare and hence more valuable than the Proofs, so such misattribution hides value.

Revealing Hidden Value

In order to reveal hidden value, we'll need to look beyond format (MS or Proof) and grade. By also considering the die pair we'll be able to take into consideration whether or not a coin is a Restrike or a First Strike. In an earlier issue, we introduced a simple flowchart that any collector can use to determine die pair, and once you know the die pair, you also know whether it's a First Strike or Restrike as follows:

- First Strikes: Snow-1, Snow-3, or Snow-5
- Restrikes: Snow-2, Snow-4, Snow-9

We'll also apply the die pair to correct any misattribution of MS versus Proof:

- MS: Snow-3 (except "Bluebird" which is Proof)
- Proof: Snow-1, Snow-2, Snow-3 "Bluebird", Snow-4, Snow-5, Snow-9

Later in this article, we'll be examining three coins which are undervalued. All of these coins are graded greater than or equal to PR66 or MS66, so we'll need a way to compare them to all the other coins graded greater than or equal to PR66 or MS66. To do that, we need to take into consideration both grade and die pair rarity. For coins graded greater than or equal to PR66 or MS66, there are 4 die pairs to consider in order from most common to most rare:

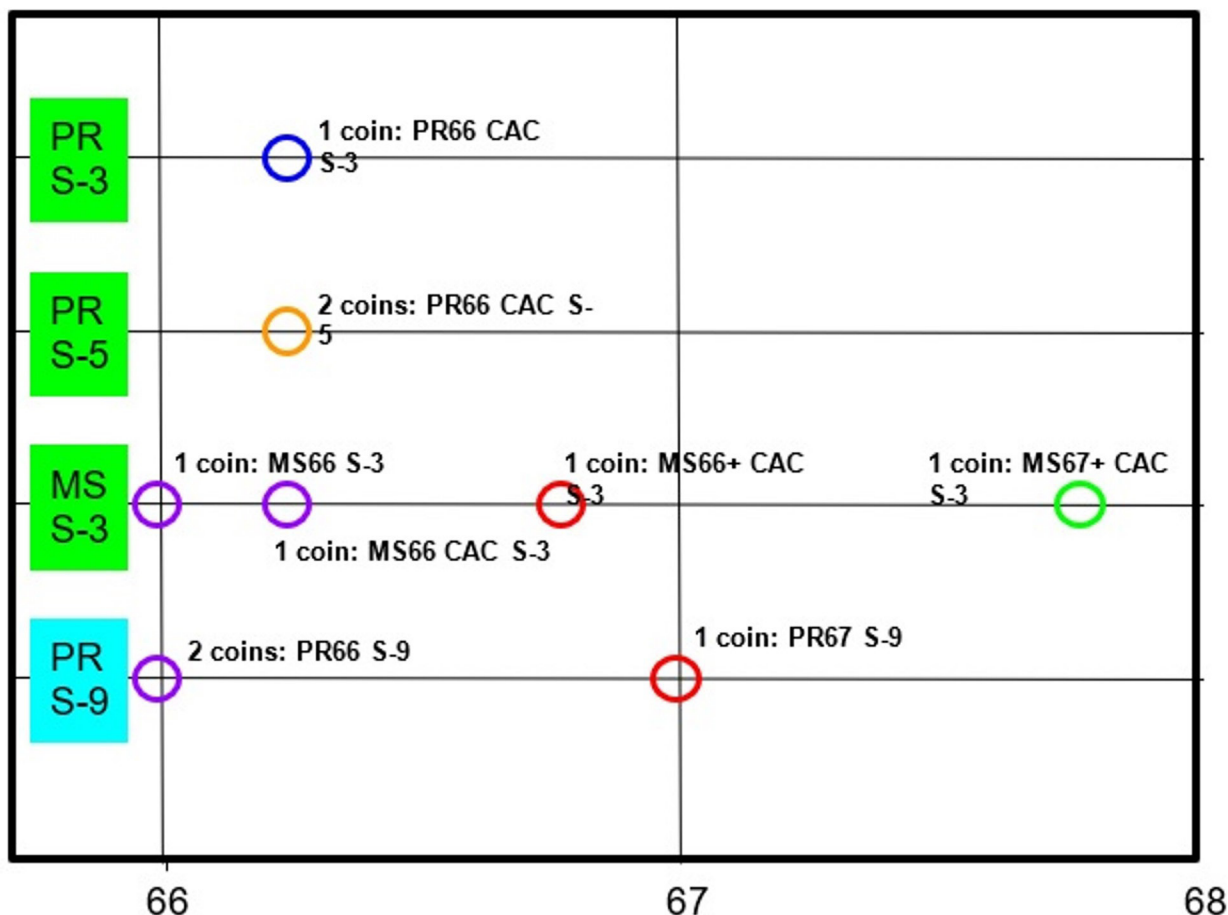
- Proof Snow-9 (Restrikes) - ~1000 coins total
(3 coins graded \geq PR66)
- MS Snow-3 MS (First Strikes) - ~200 coins total
(4 coins graded \geq MS66)
- Proof Snow-5 (First Strikes) - 15 coins total
(2 coins graded \geq PR66)
- Proof Snow-3 (First Strike) - 1 coin total
(1 coin graded PR66)

The following graph shows the 10 existing PCGS coins graded greater than or equal to PR66 or MS66, with grade on the X-axis and die pair on the Y-axis (ordered by increasing rarity of the die pair). The die pairs on the Y-axis are shown with a green background for First Strikes (MS S-3, PR S-5, and PR S-3) and a light blue background for the Restrike die pair (PR S-9). The coins are labelled indicating their actual PCGS condition and attribution, once any misattributions are corrected.

Using this graph, any 2 coins can be compared, taking into consideration both grade and die pair rarity by either the direct method if applicable or the indirect method if the direct method can't be used:

- Direct method: Obviously, two coins can be compared directly if the coin with the better die pair is also the coin with the better grade.

- Indirect method: However, if one coin has a better grade, while the other has a better die pair, they can't be compared directly. But, any two coins can be compared indirectly by the number of coins that they each directly beat.



Three Hidden Treasures

We'll now look at three examples of undervalued 1856 Flying Eagles Cents.



PR67 Snow-9

Statistically, the PR67 Snow-9 is the 2nd finest Proof, since there is a finer Proof graded PR67+ CAC. But that "finer Proof" is actually, a MS Snow-3 and should be graded MS67+ CAC. Therefore, the PR67 Snow-9 is actually the finest Proof and more importantly it is actually the finest Restrike.

When you compare appearance and reality it's clear the PR67 Snow-9 is worth more than it appears to be worth:

- Appearance: PR67 Snow-9 is 2nd finest of the Restrikes (~1,000 surviving Restrikes)
- Reality: PR67 Snow-9 is the (1st) finest of the Restrikes (~1,000 surviving Restrikes)



MS67+ CAC Snow-3

The aforementioned misclassified Snow-3 (graded PR67+ CAC but actually MS67+ CAC) is also undervalued. Officially, it is considered the finest graded Proof, and since the market confuses Proofs for Restrikes, the market thinks of it as the finest of the Restrikes.

But, since it is actually a MS Snow-3 and hence a First Strike, it is actually the finest graded First Strike. Taking into consideration both grade and die pair, from the graph, we can further see:

- In direct comparison this coin shown in green beats the 6 coins shown in purple and red.
- No coin directly beats this coin
- There are three coins that can't be directly compared (since they have better die pairs, while this coin has better grade): 2 coins PR66 CAC S-5 shown in orange and 1 coin PR66 CAC S-3 (shown in blue).
- Of the three coins which can't be directly compared to this coin, only one (PR66 CAC S-3) directly beats as many coins (6 coins) and is also directly beaten by no coin.

Thus, on the basis of the above analysis, this coin is tied for the finest of the First Strikes.

When you compare appearance and reality it is clear this misclassified coin is also worth considerably more than it appears to be worth:

- Appearance: PR67+ CAC is finest of the Restrikes (~1,000 surviving Restrikes)
- Reality: MS67+ CAC is tied for finest of the First Strikes (~200 surviving First Strikes)



The "Bluebird" Proof Snow-3 - PR66 CAC

The third example offers an even more dramatic illustration of the disparity between appearance and reality. The "Bluebird" is correctly attributed a Proof and graded PR66 CAC. Since it is officially one of four Proofs graded PR66, with 3 coins attributed as Proofs graded higher, the market - confusing Proofs for Restrikes - thinks of it as one of four coins tied for 4th place among the Restrikes.

But, the "Bluebird" is actually much more valuable. This is for two reasons:

- Although it is a Proof, since it is a Snow-3, it is not a Restrike. It is actually a first strike!
- It is the rarest first strike. It is the only Snow-3 that is a Proof, putting it in a category separate from the mint state Snow-3s.

The Bluebird and the MS67+ Snow-3 cannot be compared directly as they are differing formats. Although they can't be compared directly, they can be compared indirectly by the number of coins they each directly beat. The "Bluebird" shown in blue directly beats 6 coins total, 4 shown in purple and 2 shown in orange. The MS67+ CAC Snow-3 shown in green also beats 6 coins total, 4 shown in purple and 2 shown in red. In that indirect comparison they are equal since they each directly beat 6 coins and no coin directly beats either of them.

When you compare appearance and reality it is clear that the "Bluebird" is worth considerably more than it appears to be worth:

- Appearance: The "Bluebird" is in a 4-way tie for 4th place of the Restrikes.
- Reality: The "Bluebird" is tied for finest of the First Strikes.

More Hidden Treasures

We have considered so far three especially dramatic examples of hidden treasures, but they are certainly not the only ones. There are other hidden treasures out there to discover, and perhaps you can acquire some before the market realizes they are undervalued.

1877 Dies destroyed, Used and Retained.
By Roger Burdette. Annotated by Richard Snow

*Eds 1877?
destroyed. 11*

*Alv Straub for left
O B Hale for Assayer
A W Downing for Coiner*

2 January 1878

*Report of dies of 1877
destroyed.*

*In * Laines*

Rec'd 3 Jan 78

*W. S. Minter - Philadelphia
January 2, 1878.*

	Obv	Rev	Ret. Rev	Total
E.E.	11	17		
2	2	1		
1/2 E.	1	2		
1/4 E.	1	2		
3/4 E.	2	2		
1 D.	2	2		
	20	26		46
1/2 D.	34	34		
1/4 D.	74	69		
1/8 D.	80	78	51	5
1 Cent	46	58	47	8
20 Cent	23	21	11	166
	23	21	11	
5 Cent	1	5	5	
3 Cent	1	4	3	
1 Cent	3	2	4	
	5	3	12	20
			23	527
				50 1/4 Ret.

*Respectfully submit the above report
to the left of the West. Mint, as the number
of Dies destroyed Jan 2nd 1878.*

*Yours most respectfully
A. W. Straub
O B Hale for Assayer
A W Downing for Coiner*

COINER'S DEPARTMENT.

Mint of the United States

AT PHILADELPHIA.

January 2d. 1878.

Hon. James Pollock,
Superintendent,
Sir;

I have the honor to report that the following Dies were used in the coinage of 1877, to wit:-

Gold.	25 Eagles.	Eagles.	Half Eagles.	Three Dollars.	Two Dollars.	One Dollar.	Total
Obverse	11	2	1	2	1	3	20
Reverse	17	1	2	1	2	3	26
Total	28	3	3	3	3	6	46

Silver	One Dollar.	Half Dollars.	Quarter Dollars.	Twenty Cents.	Ten Cents.	Total	
Obverse	30	74	80	2	46	—	232
Reverse	31	69	81	1	47	—	229
Total	61	143	161	3	93	—	461

Minor.	Five Cent Pieces.	Three Cent Pieces.	One Cent.	Total
Obverse.	1	1	3	5
Reverse	5	4	6	15
Total	6	5	9	20

RG104 E-1 Box 110 Jan-Feb 1878

Cover info
Dies of 1877
Destroyed: 11

Dies destroyed January 2, 1878
Cent: 2 Obv., 3 Rev., 4 Ret. (Rev.)
3 Rev. dies corrected in pencil to 6.

January 3, 1878, Page 1
Dies used in 1877
Cent: 3 Obv., 6 Rev.

The memos supplied by Roger Burdette come from the National Archives Mint records. Record Group 104, E-1, Box 110: Jan. Feb 1878. The first one is a single page and is submitted by the Mint staff to the Chief Coiner, Oliver C. Bosbyshell by A.W. Straub, Forman of the die room, C.B Hale, Forman of the Assaying room and A. W. Downing, Forman of the Coining room.

The second four-page memo to the Superintendent of the Mint, James Pollock from Chief Coiner Bosbyshell on January 3, 1878.

The memos detail the destruction of dies on hand in 1877. Important to collectors of Indian cents is the notes showing two obverse cent dies and three reverse cent dies destroyed. The number of reverse dies

was changed in a pencil notation to six. These figures show on page 1 of Bosbyshell's report.

On page 2 of Bosbyshell's report, he details how many reverse dies were not destroyed and are to be used in 1878. Four reverse dies were on hand and used for coinage in 1878.

Page 3 shows dies that were not suitable for coinage. No cent dies are on the list.

Page 4 shows 1877 dies used. It shows three obverse cent dies and two reverse cent dies were used for coinage in 1877.

According to observations of dies used on cents in 1877 only two obverse dies and one reverse die was used to strike regular issue cents.¹ Proof dies seen are three obverse and three reverse. Clearly the documents don't square with the observations.

¹ Flying Eagle and Indian Cent Attribution Guide (2014)

2.

Recapitulation	Gold	Silver	Minor	Total
Obverse.	20	232	5	257
Reverse.	26	229	15	270
Total	46	461	20	527

This number agrees with the number reported by the Engraver, as delivered to the Correr, during the year 1877.

All of these dies were ^{defaced and} destroyed by the use of the forge and sledge, in accordance with the provisions of Section 51 Act of February 12th 1873, with the exception of the following Reverse dies, which were redelivered to the Correr, for use during 1878, to wit:-

Quarter Dollar	3
Dime	8
Two Cent Nickel	5
Three Cent Nickel	3
One Cent Bronze	4
Total	23

RG104 E-1 Box 110 Jan-Feb 1878

January 3, 1878, Page 2
Cent: 4 Rev. dies retained for use in 1878

3.

Total number of Dies received 527
Number of Reverse returned 23
Total number destroyed 504

Of the 504 Dies destroyed, there were 36 that did not enter into the coinage of 1877, leaving 468 as the number of dies actually used up in manufacturing the coin.

The 36 dies destroyed without use were made up of the following:-

Unfit for use - sinking whiles being adjusted in the

Reverse D ^o Eagle	1	0	3	Rev = 4
Trade Dollar	1	1	"	= 2
Half Dollar	2	7	"	= 9
Quarter Dollar	-	6	"	= 6
Dimes	2	2	"	= 4
Total	6	19	"	= 25

Unused Obverses.

D ^o Eagle	1
Trade Dollar	1
Half Dollar	3
Quarter Dollar	4
Total	9

Dies rec^d from San P. Mint for Examination - D.E. 104 + 16 = 2

Total 36

RG104 E-1 Box 110 Jan-Feb 1878

January 3, 1878, Page 3
1877 Destroyed dies not suitable for coinage.

4.

The 468 dies actually used up in the coinage of 1877, were as follows:-

	Obverse	Reverse	Totals	Grand Total
Gold. Double Eagle	8	13	21	
Eagle	2	1	3	
Half Eagle	1	2	3	
Three Dollars	1	1	2	
Quarter Eagle	1	2	3	
One Dollar	3	3	6	
Total	16	22		38
Silver. Trade Dollar	26	30	56	
Half Dollar	72	62	134	
Quarter Dollar	76	72	148	
Twenty Cents	2	1	3	
Dime	44	37	81	
Total	220	202		422
Minor. Five Cents	1	-	1	
Three Cents	1	1	2	
One Cent	3	2	5	8
Total	5	3		468

Very Respectfully Your Obedt Servant
O. C. Baskphell

RG104 E-1 Box 110 Jan-Feb 1878

January 3, 1878, Page 4
1877 Dies actually used in coinage.
Cent: 3 Obv. 2 Rev.

Dies 1877 } 10
destroyed

O. C. Baskphell
Correr
January 3/78

Report the number & denomination of dies used in 1877; the number destroyed; and the number returned to the Correr for use in 1878.

Rec^d Jan'y 3/78

January 3, 1878, Cover info.
Dies used, dies destroyed and dies returned to use from 1877.
Cent: 3 Obv. 2 Rev.

Lathe lines
1864 No L Snow-11
By Richard Snow



1864 No L, Bronze. Snow-11. Lathe Lines

The 1864 No L, Snow-11 is nicknamed the “Lathe Lines” variety due to the heavy raised lines that form a concentric pattern of rings around the center of the coin. The name gives away what caused these lines, but there are subtle clues that need more explaining before the true cause of this variety becomes clear.

We see these raised lines are mostly on Lady Liberty’s face. They are not visible at all among the feather headdress. Their boldness varies depending on the design element underneath and slightly on the elevation of the device element. They are concentric with the center, but slightly uneven.

We can rule out the possibility that the lines were scribed onto the finished die as they are not of the same elevation. We can use the field area as a base for determining the height of the design elements. The lines on the neck are just slightly stronger compared to the lines on the cheek, but the elevation of the cheek is much higher off the plane than the neck is. The lines rise and fall with the design. A lathe cut into the die after the design was added would have cut a line to the same elevation.



1864 No L, Bronze. Snow-11. Close up

The only conclusion we can draw is that the lathe lines were cut into the die prior to being hubbed with the design. When the die was hubbed, the cuts into the die were pressed down with the design elements.

The blank die is made from a bar of steel that is machined down using a lathe. The face of the die, the part that will strike the coin, is made into a slight cone shape. On this particular die, the cone was turned very roughly and deep lines were left cut into the die face.

The process of imparting the basic design onto the die is called hubbing. A hub is a die that has the basic design elements on its face in a raised relief, just like the resulting coin. Until 1909 it would not have a date. The hub is hardened and the die is softened, so that when pressed together, the design will push down onto the die and impart an incuse reversed image.

In this case the hub pressed the defects on the blank die down with the design. The grooves originally on the blank die face were now grooves into the finished design on the die. Areas with little detail did not efface the lines completely, while areas with significant elevation changes, like the eyebrow and feathers effaced the lines completely.

The example featured here is the earliest die state known. It was so early a die state that originally graded by PCGS as a Proof. Both dies have highly polished fields, although they show rough die striations. Although it was graded as a Proof, it is clearly not a Proof.

The 1864 No L Proof is a very scarce coin with only about 400 minted. The mintage figure in some publication shows only 150, but this is in error as more than that have been graded by PCGS alone. See Longacre's Ledger #106, August 2019 for mintage details. Even so, the value is quite high given its status as a one-year type coin.

After this early die state example was graded PR-64RB, it was placed in auctions between 2007 and 2011. Each time it sold below the market for a regular Proof 1864 No L of the same grade. This caused the market to stagnate or drop for this date. That was a shame because it is a great coin and I would have loved to buy it, but not at the level of a Proof issue.

Recently, I purchased a complete set of Proof Indian cents and this coin was in the collection. I was then able to crack the coin out of its Proof holder and submit it raw to PCGS. I wrote on the submission form in big bold letters. "THIS IS NOT A PROOF." PCGS graded it MS65RB, which was right on the mark.

This variety is found in both early and late die states. Late die state examples are found with extremely worn dies and the lathe lines are very mushy and indistinct. The lines will only be visible in protected areas around the eye and neck. These later die states are not as desirable as the bold early die states, in my opinion. The wide range of die states show that this variety was struck in large numbers. It is a two-star variety in the Attribution Guide and is listed in the Cherrypicker's Guide as FS-1401. PCGS lists it on their holder as these coin numbers:

569237 (BN) Total pop 7. (65, 64+, 64, 64, 63, 62, 55)

569238 (RB) Total pop 5. (65, 65, 65, 64, 64)

569239 (RD) Total pop 0.

Here is the current condition census known to me. Some of these do not have the variety on the label, but will have a S11 sticker on it. The ranking is my own interpretation of the value based on the quality of each coin. None are known with full red color.

1) MS65RB PCGS (PS). Very early die state.

Previously PR64RB PCGS; EERC (2021).

2) MS65RB PCGS (PS). Early die state. 90% RD.

3) MS66BN PCGS; previously NGC MS66BN.

4) MS65RB PCGS (PS) Mid-die state.

5) MS64RB NGC (PS) Early die state.

5) MS64+RB PCGS (PS) Early die state.

5) MS64RB PCGS (PS) Early die state.

8) MS65BN PCGS (PS/CAC) Late die state.

9) MS64RB PCGS (PS) Mid-die state.

10) MS64BN PCGS (PS/CAC) Early die state.



1864 No L, Bronze. Snow-11. Late die state

Keeping RD Indian Cents RD
By Greg Slaughter

Bronze Indian Cents are made of 95% copper, which any chemist will tell you begins to oxidize immediately upon exposure to oxygen in the air. Fortunately, the process is gradual over many years. While some collectors may feel uncomfortable collecting full red (RD) Indian Cents, fearing they may eventually turn brown, I think an argument can be made for their being especially collectible, because the few that have remained RD after many years are rare. But, once you do take the plunge and decide to collect RD Indian Cents, you definitely want yours to stay RD!

I see on coin message boards, collectors wondering whether they need to do anything to prevent their RD Indian cents from gradually turning brown. Experienced collectors tend to respond that they have been collecting them for years and have never seen any of them turn brown. Furthermore, they point out that these coins are 100 - 150 years old, so if they were going to turn brown, they would have done so by now. That argument seems reasonable, but before we examine it more closely, I want to show you some visual evidence that RD Indian cents are, in fact, on their way to slowly turning brown. Furthermore, I hope I can convince you that it is critical to do what you can to keep them red before it's too late. With that goal in mind, we'll explore some tips on how to keep them RD.

First of all, consider the following photo of a RD Indian Cent, along with a cube of 100% pure copper. The RD Indian Cent looks clearly more golden than the 100% copper cube. Although RD Indian Cents are sometimes described as being golden, that golden color, while beautiful, is clearly not the color of freshly minted Indian Cents. Rather, the golden color is the result of there being some oxidation of the copper, though not necessarily enough to make the coin red-brown (RB).



PCGS 25359991



PCGS 84277798



PCGS 42543446



PCGS 35932956



All RD coins are gradually turning brown and some may even be close to RB. A RB coin can have between 5% and 95% red, so that wide range for RB, leaves RD coins needing to fall into the narrow range of between 95% and 100% red. That's a pretty precarious situation for a collector of RD Indian cents, especially when the coins are close to that 95% border between RD and RB. Consider the following twelve

Indian cents, some RD and some RB. Which ones are the RD ones, and which ones are the RB ones. PCGS cert numbers are provided, so you can check your guesses on the PCGS web site.

Unless you are already familiar with these particular coins, you may find it difficult to tell the RD ones from the RB ones, especially for coins that are right on the border between RD and RB. In fact,



PCGS 25207639



PCGS 30998804



PCGS 16597586



PCGS 25041291



PCGS 25155873



PCGS 34592369



PCGS 41442335



PCGS 06615669

PCGS apparently also finds it difficult, since some coins they initially graded RB have since been upgraded to RD (they certainly couldn't have become less oxidized to warrant that upgrade). That is, in fact, the case with two of the twelve coins, both of which are still (at the time of this writing) listed in the Condition Census at the bottom of the 1877 1C, RB (Regular Strike) page, though their certs now say RD.

In case you're wondering whether there was a trick to selecting those twelve images, there wasn't. I simply used the available images I could find from the PCGS CoinFacts pages for 1877 1C, RD (Regular Strike) and 1877 1C, RB (Regular Strike).

In contrast with the previous 12 examples, many of which are considered RD, here is the best preserved RD Indian Cent I could find. Note that it looks very close to the color of the 100% pure copper cube shown earlier. We now come to what I believe to be the most compelling evidence of all ... If you look at the top PCGS registry sets for Indian cents, which typically have mostly RD coins, you'll find the RD coins come in various shades of color, and are typically not nearly as red as this one, since they are typically farther along on the eventual transition to brown. If they were not on their way to eventually turning brown, they ought to all look much like this one.



If you're now convinced that there is a good chance your RD Indian cents are destined to turn brown if you do nothing to prevent it, then let's explore what you can do about it. But, first let's examine the above argument that experienced collectors make when they explain why there is nothing to worry about.

Since Indian cents are between 100 - 150 years old, it seems reasonable to argue that if they were gradually turning brown they should have done so by now ... until you consider the fact that they have only

been kept in slabs for the last 30 years or so. Before that, very few RD Indian cents survived out of the vast majority of millions minted that eventually turned brown. The red ones didn't survive by accident! No, they survived because collectors took precautions, to keep them from being exposed to the air. I suspect the RD Indian cents didn't really start slowly turning brown until they went into slabs in the last 30 years! Once they went into slabs, they all oxidized to varying degrees as evidenced by the fact that we've now seen many RD Indian Cents in this article, in a variety of shades of color.

But, what about collectors who say they have been collecting them for decades and have never noticed them turning brown in their slabs? I think it makes sense that they haven't noticed them turning brown, because it's so gradual. I suspect it's like parents who don't notice their kids growing taller every day, even though people who visit after being away just a few months are always remarking that they seem taller. However plausible you find my counter argument, more importantly I've already shown you visually that they are gradually turning brown, so let's explore what to do about it.

Maybe you just need the latest PCGS holder. In 2015, PCGS announced that they upgraded their holder and they noted:

"... the new holder's airtight design will help prevent spotting and toning of coins. ... These sturdier, tamper-evident holders have no edge seam, are virtually airtight and will provide even more protection against potential environmental damage to coins"

The new holders help slow the oxidation, but they don't stop the oxidation completely, because the holders are only "virtually airtight," not completely airtight. But, the new holder does help a bit. Since they are "virtually airtight," it takes a while for the oxygen that reacts with the coin to be replaced by new oxygen that will provide further oxidation.

To stop the oxidation completely, the holders need to be made completely airtight, and the air inside the holders needs to be replaced with an inert gas, such as nitrogen or argon. That is going to be a bit of a challenge, because the holders are currently made of plastic, and those gasses diffuse through plastic. Instead, the holders need to be made of glass (preferably not glass prone to breakage), which can be made

completely airtight. Such a glass holder, by the way, would have superior optical properties to plastic, and would thus be better anyway for viewing the coin inside the holder.

If enough people ask PCGS to make an airtight holder, there is a chance they will do that. In the meantime, it's worth at least upgrading to the latest holder that does at least slow the oxidation a bit. It's also worthwhile considering other ways to slow the oxidation.

Passivation Covers

Some collectors mention that they preserve their RD coins by keeping their slabs stored in passivation covers, such as Intercept boxes made by Leuchtturm. I think that's worth doing, but keep in mind that the chemical that is the active ingredient on the inside surfaces of the boxes only reacts with and removes chemical impurities in the air, such as sulfides. They, of course, don't do anything to remove the oxygen in the air that is slowly turning the copper brown! But, these boxes are still worthwhile, because they reduce the chance of impurities in the air, such as sulfides, turning the copper green.

Further Prevention

One simple thing that should make a difference is storing the slabs at a significantly reduced temperature than room temperature. The oxidation reaction is slowed significantly by reducing the heat. Chemical reactions, such as oxidation require activation energy, so by keeping your coins cold you significantly reduce the available activation energy. Lab refrigerators, especially ones that fit in small spaces under counters, are especially nice and can be purchased for less than a thousand dollars. Although such refrigerators are expensive, their price is small in comparison to RD Indian cents that can each be worth many thousands of dollars more than RB and BN ones.

Furthermore, such refrigerators have excellent controls for reducing the humidity. The water in the air significantly enhances the speed of oxidation, so it's best to store the slabs in a refrigerator with humidity maintained as low as possible. For this reason, it can't hurt to also store the slabs with desiccants. By the way, it's important to replace the desiccants periodically, since they absorb water. Rather than having to buy new desiccants all the time, I simply put them in the oven on low heat for an hour or so to release the absorbed water.

You might be thinking that it's a shame to have to keep the coins refrigerated, because then you can't take them out and enjoy them. But, as long as you only occasionally take them out and they spend most of their time cold, the oxidation reaction should be significantly slowed.

Completely Preventing Oxidation

The combination of (1) new "virtually airtight" PCGS holders, (2) passivation covers, (3) refrigeration with humidity controls, and (4) desiccants should help slow the oxidation process.

But, the only way to completely prevent oxidation is to make sure the coins do not come into contact with oxygen. Until PCGS offers completely airtight holders filled with an inert gas, there are only two solutions I can think of that will completely prevent coins from slowly oxidizing:

1. You could simply do what collectors did to preserve their RD coins before the advent of slabs: break them out and wrap them in something that prevents air contact.
2. You could store the slabs somehow in a special container that maintains and constantly replenishes an inert gas inside that container. What little oxygen inside the holders would eventually diffuse out into the container and be replaced by the inert gas.

Neither of these two solutions is really acceptable. Going back to the days before slabs has major drawbacks, making it untenable. As for the second solution, although it is in principle possible, I'm not aware of any such product available.

What about removing or reversing oxidation? We've focused so far on prevention, because that is really the only solution. But, since there is much discussion on message boards on a wide variety of techniques for removing oxidation, it's worth addressing that too.


There are many ideas for how to clean copper coins, but I strongly recommend not trying any of them. In fact, I'll go so far as to say that once a coin has oxidized, it can't be reversed in a way that restores the coin to its pre-oxidized state. All the ideas I've read on message boards involve dissolving the oxide layer. Even if you're incredibly careful not to rub and create hairlines, and you can somehow manage to remove only the oxide layer and nothing else, you will

still not restore the coin. The problem is that coins all have a “skin” that was formed under the intense pressure of the minting press. The “skin” of freshly minted coins has a microscopic crystalline structure of the metal atoms that imparts what we see as luster. Once you remove the oxide layer, you remove the “skin,” leaving a rougher surface that never resembles the look of mint luster.


In fact, it’s the oxidation itself that changes the surface. When copper oxidizes, oxygen first diffuses into the top most layers of copper atoms in the crystal lattice. Eventually, as these oxygen atoms bond with the copper atoms in the top layer of the crystal lattice, the copper oxide molecules formed dislodge the orientation of the remaining copper atoms in the crystal lattice. Even if you could dissolve only the oxide layer, what you would have under that oxide layer is rougher, because of the dislocation of the atoms caused by the oxidation. Though the oxidation layer lacks the mint luster, the oxidation layer is at least somewhat smooth (at least on top), so it’s better just to keep it in place.

I haven’t seen it discussed on message boards yet, but it is possible to reverse an oxidation reaction by performing a reduction reaction. For example, the coin could be heated to provide the activation energy for the reduction reaction. Then hydrogen gas could be passed over the coin to cause the reduction reaction. In doing so, the hydrogen would react with the oxygen in the copper oxide, forming water vapor, and ultimately reducing the copper oxide back to copper. But, doing that doesn’t reverse the damage done by the oxidation in the first place, so even after the reduction of copper oxide back to copper, you would no longer have the mint luster on the copper.


Finally, it’s worth pointing out that to clean coins, you would have to break them out of their slabs ... And then you need to get them back into a slab, hopefully one with the same grade as before. But, PCGS is definitely going to be suspicious when they see a raw coin to be graded, and certainly they will examine the surface and note it has been cleaned.






*Specializing in Flying Eagle, Indian, Lincoln,
and Early American Copper Cents*



Charmy Harker
P.O. Box 61987
Irvine, CA 92602
(949) 632-0414
charm@thepennylady.com
www.ThePennyLady.com



1862



S13 1862, Die file marks.

S13 1862, Pierced Ear.

Obv. 15: (RE) Heavy vertical die file marks through the ear.

Rev O: Olive leaf and shield points away from the denticles.

Attributed to: Joseph Sweeney

Vertical die file marks through the ear. {50}



S13 1862, Date area.

1875

S19 1875, Spiked Eye.

Obv. 21: (LH) Full D hub. Two heavy die lines around the eye. One goes through it into the nose. The other is just to the right of the eye. Die crack on the tops of all letters of the legend. A die crack connects the base of 18 with the denticles at 7:00. Die crack from the area between the top of the 1 and the bust point to the ribbon end.

Rev. V: Olive leaf and shield points well away from the denticles.

Attributed to: Joseph Sweeney

Two die lines by the eye. {64BN}



S19 Spiked eye.

1880

S19 1880, Die file marks in shield.

Obv. 22: (RH) Light die crack connects the tops of AT in STATES.

Rev. U: Die file marks in the shield. A bold one is visible in the lower left quadrant of the shield.

Attributed to: Ed Nathanson

Heavy die file marks. {64BN}



S19 1880, Date area.



S19 Die file marks in Shield.



1891

S28 1891, 1/1 (n).

Obv. 31: (LH) Minor repunching above the tip of the 1 digit.

Rev. AF: Shield points and olive leaf firmly connected to the denticles.

Attributed to: Ed Nathanson

Looks like a small dash above the 1. {63RB}



S28 1891, 91/1 (n).



1893

S23 1893, 893/983 (e).

Obv. 23: (B) Repunching to the right in both loops of the 8 and 9. Repunching off the top ball of the 3.

Rev. X: Shield points and olive leaf connected to the denticles.

Attributed to: David Killough

Very similar to S2. Compare the repunching on the 3. On S2 it is a little higher than on S23. {60BN}



S23 1893, 893/983 (e).

1902

S22 1902, 1/1 (s).

Obv. 25: (LE) Moderate repunching visible at the base of the 1.

Rev. V: Shield points connected. Olive leaf well away from the denticles.

Attributed to: David Killough

Repunching on the 1 only. {63BN}



S22 1902, 1/1 (s).

1904

S25 1904, 1 in Denticles.

Obv. 26: (C) The top of a 1 digit is visible in the denticles below the 1, one denticle to the left.

Rev. Z: Shield points and olive leaf well away from the denticles.

Attributed to: David Killough

Fairly minor misplaced digit variety. {58}



S25 1904, 1 in Denticles.

1905



S36 1905, 0/0 (n).

S36 1905, 0/0 (n).

Obv. 36: (RH) Minor repunching inside the 0 digit at the base.

Rev. AK: Shield points connected to the denticles. Olive leaf away.

Heavy die crack from the denticles at 3:00 to the wreath to the denticles at 5:00.

Attributed to: Joseph Sweeney

Minor repunching only inside the 0. The die crack likely develops into a full cud. {58}



S36 1905, Reverse die crack.

1908



S18 1908, 1/1 (e).

S18 1908, 1/1 (3).

Obv. 40: (B) Repunching of the top of the 1 is separated from the 1 digit to the right.

Rev. AO: Right shield point connected to the denticles. Left shield point just away. Olive leaf away from the denticles.

Attributed to: David Killough

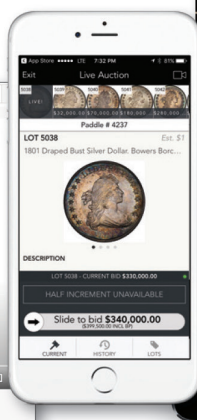
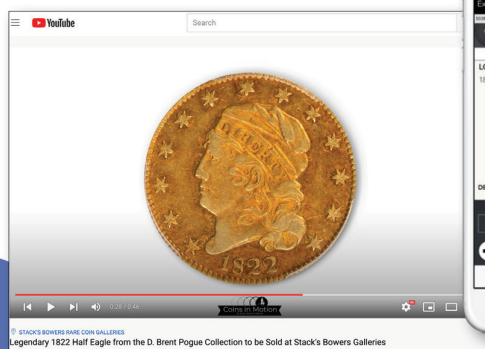
Fairly bold repunching. The variety previously listed as S18 was found to be a duplicate of S6. {40, 15}

Now is the Perfect Time to Consign to Stack's Bowers Galleries

Capitalize on the current dynamic market, the unmatched expertise of Stack's Bowers Galleries and our robust 2022 schedule of Showcase events and Collectors Choice Online auctions. Record prices are being realized at every turn. Whether you are thinking of selling your entire collection or just a few select pieces or duplicates, we will showcase your holdings to their finest advantage to the world's most active buyers. And, we can offer you instant cash in the form of a generous advance against the proceeds of your consignment.

Stack's Bowers Galleries is the most technologically advanced auction house in the world. Our newly opened Griffin Studios is a custom-built, broadcast ready television, film and event facility based in our headquarter in Costa Mesa, California. Designed from the ground up to produce the ultimate live auction experience, our livestream presentations are enhanced by our patent pending Coins In Motion technology. These innovations, in combination with our award-winning, live online bidding application, create the best online bidding experience in the hobby.

Contact us today! The time is right and a personalized plan is just a phone call away!



Contact us Today to Consign to an Upcoming Auction!
West Coast: 800.458.4646 • East Coast: 800.566.2580 • Consign@StacksBowers.com

LEGENDARY COLLECTIONS | LEGENDARY RESULTS | A LEGENDARY AUCTION FIRM

Stack's Bowers
GALLERIES

America's Oldest and Most Accomplished Rare Coin Auctioneer

1550 Scenic Avenue, Suite 150, Costa Mesa, CA 92626 • 949.253.0916
470 Park Avenue, New York, NY 10022 • 212.582.2580
Info@StacksBowers.com • StacksBowers.com
California • New York • Philadelphia • New Hampshire • Oklahoma
Hong Kong • Paris
SBG LongacreLederger TechConsign 211028